KAZAKOV, Ye. D.

KAZAKOV, Ye.D.

"Biochemistry of grain." V.L.Kretovich, ed. Reviewed by E.D.Kazakov. Biokhimiia 19 no.4:510-512 Jl-Ag '54. (MLRA 7:9)
(Grain) (Kretovich, V.L.)

KAZAKOV, Ye., kandidat khimicheskikh nauk.

Conditioning of grain in flour mills. Muk.-elev.prom. 20 no.1: 23-25 Ja '54. (MLRA 7:7)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti.
(Grain milling)

KAZAKOV, Ye., kandidat khimicheskikh nauk.

History of grain and flour quality evaluation. Muk.- elev.prom. 20 no.4:29-31 Ap '54. (MLRA 7:7)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti. (Grain--Grading) (Flour)

KAZAKOV, Ye., kandidat khimicheskikh nauk.

Heliotrope and its biological characteristics. Mak.-elev.prom. 20 no.8:28-29 Ag '54. (MLRA 7:9)
(Heliotrope (Plant))

KAZAKOV, Ye., kandidat khimicheskikh nauk.

Trichodesma incanum, its biological characteristics and toxicity. Muk.-elev.prom. 20 no.9:30 S '54. (MLRA 7:12)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti. (Algae) (Poisonous plants)

KAZAKOV, Ye., doktor tekhnicheskikh nauk.

Coordinate scientific research and industrial requirements.
Muk.-elev.prom.21 no.12:3-5 D '55. (MLRA 9:4)

1.Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti. (Grain milling)

KAZAKOV, Ye.D.

"Physiological and biochemical features of corn storage." M.G.Golik. Reviewed by E.D.Kazakov. Biokhimiia v1 no.2:307-309 Mr-Ap '56. (MLRA 9:8)

(CORN (MAIZE)--STORAGE) (GOLIK, M.G.)

KAZAKOV, Ye.D., professor, doktor tekhnicheskikh nauk.

Theoretical bases ofhydrothermal conditions in warehouses during long-term storage of goods. Trudy MTIPP no.6:158-160 '56. (MLRA 10:3)

(Moisture) (Temperature)

AAZAKOV, I.e., doktor tekhnicheskikh nauk.

The 25th anniversary of the Moscow Technological Institute of the Food Industry. Muk.elev. prom.22 no.3:30-32 Mr '56. (MIRA 9-7)

1.Moskovskiy tekhnologicheskiy institut oishchevoy promyshlennosti.
(Moscow--Food industry--Study and teaching)

KAZAKOV, Ye., doktor tekhnicheskikh nauk.

Crease of wheat grains. Muk.-elev.prom.22 no.10:16-17 O '56.
(MLRA 9:12)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti.
(Wheat)

KAZAKOV, Ye.D., prof., doktor tekhn. nauk.

Construction of elevators in capitalistic Russia. Trudy MTIPP no.7:73-86 '57. (MIRA 10:12)
(Grain elevators)

KAZAKOV, Ye.D.

Temperature fields in a warehouse during long storage of goods and materials. Trudy MTIPP no.8:80-84 '57. (MIRA 10:12)
(Warehouses--Air conditioning)

KAZAKOV, Ye.D., prof., doktor tekhn. nauk.

Morphological characteristics of barley grains. Trudy MTIPP no.9: 100-106 '57. (MIRA 10:12)

(Barley)

KAZAKOV, Ye.D.; SAKHAROVA, I.A.

Morphological changes taking place in wheat kernels during hydrothermal treatment. Izv. vys. ucheb. zav.; pishch. tekh. no.1:19-26 '58. (MIRA 11:8)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti, Kafedra biokhimii i zernovedeniya.
(Grain handling) (Wheat)

KAZAKOV, Ye.D.; SAKHAROVA, I.A.

Changes in the size of the skin and the aleuronic layer of wheat grains during conditioning. Izv. vys. uchob. zav.; pishch.tekhn. no.3:9-13 '58. (MIRA 11:9)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti, Kafedra biokhimii i zernovedeniya.
(Wheat)

SOV/3-58-11-1/38

AUTHOR: Kazakov, Ye.D., Professor, Doctor of Technical Sciences

TITLE: Scientific-Research Work Under Conditions Caused by the Reorganization of the Higher School (Nauchno-issledovatel'skaya rabota v usloviyakh perestroyki vysshey shkoly)

PERIODICAL: Vestnik vysshey shkoly, 1958, Nr 11, pp 3 - 6 (USSR)

ABSTRACT: The author contributes to the public discussion on problems raised by N.S. Khrushchev, dealing with intensifying the school's contact to life and the further development of education. The radical changes which the higher school is facing have been caused by the economic and cultural development of the country. These changes will eliminate serious deficiencies existing in the work of vuzes; among them, the training of specialists with no proper contact with reality is the most important. Many professors and instructors have not yet established stable connections with industry, and as a result the scientific plans of several vuzes contain only an insignificant number of important theoretical problems. The principal deficiencies in developing scientific activity rest with the vuzes themselves, and are due to poor organization, insufficient enrollment of highly qualified workers and the inability to make appropriate use of

Card 1/3

SOV/3-58-11-1/38

Scientific-Research Work Under Conditions Caused by the Reorganization of the Higher School

personnel. This, to a certain extent, also refers to the Moscow Technological Institute of the Food Industry. The author repudiates the excuse that poor material and technical outfit is the main obstacle to developing vuz research work, but admits that some questions still remain to be solved. The planned reorganization of higher education will open new prospects for the development of research activity. Before all, the conditions of work with the students will change, and this will necessitate a better knowledge of production by the instructors, and hence a close contact to industry. The author raises again the question of coordinating vuz research and that of institutes of the USSR Academy of sciences and the academies of sciences of the Union republics. He speaks of the expected increase in agricultural production and the necessity of improving the methods of storing and processing the raw material. He also mentions the problem of linking regular day-time in-

Card 2/3

PISAREV, Nikolay Semenovich, prof.; KAZAKOV, Ye.D., prof., red.; LEVCHUK, K.V., red.izd-va; PAVLOVSKIY, A.A., tekhn.red.

[Study of commercial products and foodstuffs] Tovarovedenie promyshlennykh i prodovol'stvennykh tovarov. Moskva, Vneshtorgizdat. Vol.3. [Foodstuffs] Pishchevye tovary. 1959. 366 p. (MIRA 12:10)

(Food industry)

KAZAKOV, Ye.D.

Quality and technological characteristics of grain harvested in separate stages. Izv.vys.uchab.zav.; pishch.tekh. no.4: 9-28 '59. (MIRA 13:2)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti. Kafedra biokhimii i zernovedeniya.
(Harvesting)

KAZAKOV, Ye.D.; SAKHAROVA, I.A.

Changes in the ash content of the endosperm during hydrothermal treatment of wheat grain. Dokl.AN SSSR 132 no.6:1438-1440 Je '60. (MIRA 13:6)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti. Predstavleno akademikom A.I. Oparinym.
(WHEAT) (ENDOSPERM)

KAZAKOV, Ye.D.; SAKHAROVA, I.A.

Effect of the internal heat and mass exchange on the migration of mineral substances in wheat grain undergoing hydrothermal conditioning. Inzh.-fiz.zhur. no.6:94-98 Je '60. (MIRA 13:7)

1. Tekhnologicheskiy institut pishchevoy promyshlennosti, g.Moskva.
(Grain handling) (Heat--Transmission) (Mass transfer)

KAZAKOV, Yevgeniy Dmitriyevich, doktor tekhn. nauk, prof.; KEYZER, V.A., red.; GOLUBKOVA, L.A., tekhn. red.

[Harmful impurities in grain; poisonous and those requiring quarantine] Vrednye primesi v zerne; iadovitye i karantinnye. Moskva, Zagotizdat, 1961. 191 p. (MIRA 15:1)
(Grain)

KAZAKOV, Ye.D.

Production of grain in the U.S.S.R. Izv. vys. ucheb. zav.; pishch. tekh. no. 2:7-26 '61. (MIRA 14:5)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti. Kafedra biokhimii i zernovedeniya.
(Grain)

KAZAKOV, Ye.D.; SAKHAROVA, I.A.

Density alteration of wheat in its hydrothermal treatment. Izv. vys. ucheb. zav.; pishch. tekh. no. 2:79-82 '61. (MIRA 14:5)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti, Kafedra biokhimii i zernovedeniya.
(Wheat) (Grain handling)

KAZAKOV, Ye.D.; LISTVIN, V.S.

Temperature field of corn grain under the action of water. Inzh.-fiz. zhur. 4 no.6:132-134 Je '61. (MIRA 14:7)

1. Tekhnologicheskiy institut pishchevoy promyshlennosti, Moskva.
(Corn (Maize))
(Seeds--Morphology)

KAZAKOV, Ye.D.; SAKHAROVA, I.A.

Physicochemical change occuring in wheat grains during hydrothermal processing. Trudy MTIPP 15:41-44 '60. (MIRA 16:2)

(Wheat—Analysis and chemistry) (Heat—Transmission)

ADNAN, Al'-Zubaydi; KAZAKOV, Ye.D.

Gluten of seven varieties of the wheat of the Iraq Republic. Izv.-vys.uchab.zav.; pishch.tekh. no.1:13-15 '63. (MIRA 16:3)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti, kafedra biokhimii zernovedeniya.
(Iraq—Wheat—Varieties)

KAZAKOV, Ye. D.; LYUBUSHKIN, V. T.; KAZAKOVA, A. F.

Linear dimensions of corn kernels and their variability. Izv.vys. ucheb.zav.; pishch.tekh.no. 2:10-15 '64. (MIRA 17:5)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti, kafedra promyshlennoy pererabotki kukuruzy i kafedra biokhimii i zernovedeniya.

AINAN AL'-ZUBAYDI; KAZAKOV, Ye.D.

Chemical composition of Iraq wheat kernels. Biokhim. zer. i khlebopech. no.7:139-143 '64. (MIRA 17:9)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti.

KAZAKOV, Ye.I.; OGNEVA, D.S.

Ash content of the component parts of corn kernels. Biokhim. zer. i khlebopech. no.7:275-281 '64. (MIRA 17:9)

1. Moskovskiy tekhnologicheskiy institut pishchevoy promyshlennosti.

KAZAKOV, Yevgeniy Dmitriyevich

[Study of grain and the principles of plant growing] Zernovedenie s osnovami rastenievodstva. Moskva, Kolos, 1965. 285 p. (MIRA 18:7)

KAZAKOV, Ye.G., inzh.

Making silicate concrete products in closed molds. Stroi. mat. 6 no.12:6-8 D '60. (MIRA 13:11)
(Sand-lime products) (Autoclaves)

KAZAKOV, Ye. G.

Industrial units for high-temperature heating by means of high-boiling organic heat-carrying agents. Biul.tekh.-ekon.inform. no.6:14-17 '61. (MIRA 14:6)
(Heating)

KAZAKOV, Ye. I.

PA 27T33

USSR/Gasoline - Production
Desulphurization

Dec 1946

"The Problem of Contact Desulphurizing of Shale and Oil Gasolines," Ye. I. Kazakov, N. G. Edel'shteyn, A. F. Chegis, 8 pp

"Iz Ak Nauk, Otd Tekh Nauk" No 11-мм.1621-8

Discusses the possibility of producing a contact energetically reacting with sulphur mixtures of aliphatic and cyclic character from natural limonite iron ore by activating it with manganese or magnesium and adding hydrogen.

ID

27T33

KAMAKOV, Ye. I.

"Influence of the Chemical Nature of Humus Coals on the Chemical Composition of Their Primary Tars," Sub. 19 Jun 47, Inst of Mineral Fuels, Acad Sci USSR.

Dissertations presented for degrees in science and engineering in Moscow in 1947.

SO: Sum.No.457, 18 Apr 55

eA

21

Investigation of the process of low temperature decomposition of the constituent components of peat K. I. Karaday. *Izvest. Akad. Nauk S.S.S.R. Otdel. Tekh. Nauk* 1949, 1240-30.—Waxes, resins, cellulose, water-sol. substances, lignin, and humic acids were dry distd. to det. yield and compn. of primary tars. Formation of primary tar depends upon nature of the components (detd. by primary conditions of their accumulation) and also upon the type of peat and its degree of change (decompn. and humification). With increasing degree of change of peat, the amt. of carbohydrates and lignin therein decreases while that of bitumens and humic acids increases relatively. Therefore, the formation of primary tar from carbohydrates and lignin is directly proportional to the degree of change of peat, while for bitumens and humic acids, it is inversely proportional. Nature of humus substances, detd. by the presence of cations in their mols. in connection with primary conditions of formation (chem. compn. of water feeding the peat bog), has a distinct influence upon their thermal decompn. and the formation of tar. Unchanged, humic acids of upper peat, which were formed under conditions of waters lean in Ca, Fe, etc., yield 8.0% tar and have a noticeable role in tar formation. The humus portion of lowland peat, representing humates, yields 2.2% tar and its role in tar formation is insignificant. B. Z. Kaunch

1951

KAZAKOV, E I

USSR

Genesis and chemical nature of sweet water sapropels. E. I. Kazakov. *Trudy Inst. Goryuch. Iskopaemykh, Akad. Nauk S.S.S.R.* 2, 252-66(1950).—The article is largely polemical opposing the views of Potonie who considered sapropels as being a mech. accumulation of the plankton residues supposedly consisting of waxes and fats. Only recently have humic materials been assigned a prominent role in the formation of sapropels. W. M. Sternberg

KAZAKOV, Ye. I.

"Investigation of the Chemical Nature of Sapropels, Peats and Humic Coals and Its Role in the Formation of Tar." Sub 25 Jan 51, Inst of Mineral Fuels, Acad Sci USSR.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55

КАЗАКОВ Е.И.

Fuel Abstracts
Vol. 14 No. 4
Oct. 1953
Natural Solid Fuels:
Sources and Properties

2993. Mechanism of Formation of Asphaltenes in Process of Thermal Decomposition of Humus Fuels. Kazakov, E. I. and Grigor'eva, K. V. (Zh. Prikl. Khim. (J. appl. Chem., U. S. S. R.), 1952, vol. 25, 900-1000; abstr. in Chem. Abstr., 1953, vol. 47, 3541). Heating various specimens of peat, peat lignin, cellulose, peat humic acids and coal, either in nitrogen or without nitrogen, at 550° 1 hour after a 1 hour heating-up period invariably gave 10-30 times more asphaltenes in cases in which the nitrogen stream was not passed over the heated material in a tube reactor. The ratio of acidic asphaltenes to phenols was 14-40 times greater in the nitrogen atmosphere than without the latter. The acidic asphaltenes are phenols of high molecular weight; they are insoluble in petroleum ether but soluble in benzene. The asphaltenes in general are cyclic substances and result from secondary reactions from the products formed by primary decomposition of the heated humic matter, and arise in part from the phenols of low molecular weight which are the primary products. C. A.

Organic component analysis of sapropels. E. I. Kazakov. *Trudy Inst. Torfa, Sapropelevykh Iskopaemykh* (Minsk) No. 1, 39–48; *Referat. Zhur., Khim.* 1955, No. 9770 — A sample of sapropel is dried at 80–90° or higher in an atm. of N. A 100-150-g. sample is ground in a mortar and passed through a 0.25-mm. screen. Moisture, ash, and CO_2 contents are detd. and the dry, ashless matter in the sapropel is compounded. The bitumens A are extd. with a mixt. of alc. and benzene, and after driving off the solvents the following are detd.: substances insol. in Me_2CO (waxes, and solid hydrocarbons), insol. in petr. ether (tars), and sol. in Me_2CO and petr. ether (fats, fatty acids, and liquid hydrocarbons). In each of the bitumen components thus sepd. are detd. acid no., ester no., and I no. After extg. the bitumens in the sapropels, water-sol. substances are detd. by extn. with cold and warm H_2O. In the water-ext. are detd. monosaccharides and disaccharides, uronic acids, and N. The residue is hydrolyzed in 2% HCl and in the hydrolyzate glucose is det. and recalcd. to hemicellulose. A sample of sapropel is treated with boiling water to remove pectins and pentosans are then detd. The residue after acid hydrolysis is extd. with alc.–benzene mixt. to obtain bitumen C. The new residue is treated with 1% NaOH and the humic acids in soln. are ppte. with HCl, filtered, dried, and weighed. The separate detn. of humic acids is done in an atm. of H_2 to prevent their oxidation. In the humic acids methoxy, carboxylic, and phenolic hydroxyl groups are detd. In the residue after removing the humic acids cellulose is detd. by hydrolysis with 80% H_2SO_4 and in the hydrolyzate glucose is detd.

M. Tigson

KAZAKOV, E.I.

✓1130. APPLICATION OF THERMOGRAPHIC METHOD TO EXAMINATION OF OIL SHALES. Klinov, B.K., Kazakov, E.I. and Lukashevskaya, N.L. (Moscow: Acad. Sci. U.S.S.R., 1955, 176p. 1st Conference on Thermography, Kazan 1953", 148-153; abstr. in Ref. Zh. Khim. (Ref. J. Chem., Moscow), 1956, (24), 77547). A differential thermographic method was used to study oil shales during thermal decomposition. A Kurnakov apparatus was used with a quartz cover to protect the thermocouple against carbon deposition. The different types of shale were found to give typical thermograms. The chief mineral impurity affecting the thermal decomposition of kukersite shale is calcium carbonate.

KAZAKOV, E I.

4371. WORKING OUT A METHOD FOR OBTAINING BITUMEN FOR ROAD SURFACES FROM TARS OF VOLGA OIL SHALES. Klimov, D.K., Kazakov, E.I., Tyshkova, L.A. and Yelchenkova, A.B. (Izv. Akad. Nauk SSSR, Otdel. Tekh. Nauk (Bull. Acad. Sci. U.S.S.R., Sect. Tech. Sci.), Oct. 1953, 1383-1391). It is hoped to obtain low sulphur liquid fuel, road bitumen, phenols and sulphur from Volga region oil shales. A satisfactory road bitumen was achieved in the laboratory by putting 1 kg of residual tar, boiling at 320°C and above, in a flask, heating to 170-180°C and oxidising it by bubbling air through at 4/1./min. A batch was made in full scale plant, mixed with sand and stone dust, and tested as a road surface.

9-13-54 XJP

Journal of the Institute of Petroleum
Vol. 40 No. 361
Jan. 1954
Products

100. Investigation of the nature of "asphaltenes" from humic tars. E. I. Kovaleva and K. V. Grigor'eva. *Zhur. Prikład. Khim.*, 1953, 26, 60–100. Substances insol in petroleum ether (30°–60°) and sol in C_6H_6 were yielded (13·19%) by low-temp. tars from peat and coal. Tars were preliminarily dewaxed with acetone. "Asphaltenes" can be divided into bases (11·1–6·5%), phenols (53·80%), and neutral (25–30%) components. Analyses given. Their mol. wt. (280–370) is much less than that of asphaltenes from petroleum (*ca* 3000). Tar "asphaltenes" have high content of N_2 (1·7–2·7%) and O_2 (13·14·7%).
V. B.

5-11-54

KAZAKOV, E. I.

Fuel Abst.
Vol. 15 No. 4
Apr. 1954
By-Products of Carbonisation and Gasification

2888. COMPOSITION OF TARRY COMPONENTS OF PEAT. Kazakov, E.I. (Zh.prikl. Khim. (J. appl. chem., U.S.S.R.), June 1953, vol. 26, 669; abstr. in Chem. Abstr., 1953, vol. 47, 11693). Thermal decomposition of various components of peat was examined. In formation humic acids, lignin, and carbohydrates take part in the formation of ligroine-insoluble products. Nitrogenous products of the pitch form largely from decomposition of humic substances in peat. The ligroine-soluble phenols with low molecul weight are formed mainly from tarry matter and partly from lignin and humic acids. The neutral oils of the pitch form from all peat components (bitumen, humic acids, lignin, and carbohydrates). Thu the composition of peat bears an important relation to the type of products formed on thermal treatment. Typical compositions of the pitch are given. C.A.

KAZAKOV, E. I.

General and physical chemistry

Boris Konstantinovich Klimov (1859-1953). E. I. Kazakov. *Zhur. Prikl. Khim.* 26, 807-8(1953).—Obituary of Klimov, a fuel chemist, with portrait. G. M. K

KAZAKOV, E. I.

USSR/Chemistry - Analysis

Card 1/1 : Pub. 124 - 10/24

Authors : Kazakov, E. I., Dr. of Techn. Sc.; and Tyazhelova, A. A., Cand. of Chem. Sc.

Title : Highway asphalt from Volga region shales

Periodical : Vest. AN SSSR 9, 60-61, Sep 1954

Abstract : The chemical and technical properties of asphalt, derived from the Volga region shales, are analyzed. The industrial process of extracting bitumen from petroleum shales is described. The shale asphalt was found to possess high adhesive properties and as such is highly recommended for road building, manufacture of roofing materials, additives for paint and rubber products.

Institution : ...

Submitted : ...

KAZAKOV, E. I.

The evolution rate of volatile matter during low-temperature carbonization of finely crushed shales with gaseous heat carriers. E. I. Kazakov and L. P. Malashenko. *Trudy Inst. Goryuch. Iskopaemykh, Akad. Nauk S.S.S.R., Otdel. Tekh. Nauk* 6, 198-208(1958).—The tar and gas evolution from different sizes of Estonian and Kashpir shales was studied in a special app. in which a 20-cm³ sample in a small beaker with a perforated bottom was heated by passing N through the sample for a definite time, and then "freezing" the reaction by plunging the sample into H_2O. The shale was used in 7 size groups between 10.0 and 0 mm. Volatile matter was completely evolved in 2–3 min. with the gas flowing at 0.75–1.25 m./sec., heated to 450–600°. The rate of volatile-matter evolution was higher from the Kashpir than the Estonian shale. The carbonization rate was increased by raising the gas velocity through the shale mass, and it is believed that heating in a fluidized layer will prove effective. The evolution rate of volatile matter from finely crushed shale when carbonizing in a curvilinear gas flow. *Ibid* 209–11. The volatile-matter evolution from Kashpir shale crushed as above was studied with the particles suspended in a CO_2 stream moving along a curved path. The app. used is described. The volatile matter was practically completely expelled from particles 0.5–7 mm. in 90 sec. with [illegible] flowing at the rate of 120 m./sec. The process is complete under such conditions in half the time required for carbonization with the gas passing through the shale at the rate of 1.25 m./sec.

M. Sternberg

KAZAKOV, E.I.

3273. EVOLUTION RATE OF VOLATILE MATTER FROM FINELY CRUSHED SHALE WHEN CARBONISING IN A CURVILINEAR GAS FLOW. Kazakov, E.I. and Nolosheno, L.P. (Trud. Inst. gor. Iskop. (Trans. Inst. combust. Miner., Acad. Sci. U.S.S.R.), 1955, vol. 6, 207-211; abstr. in Chem. Abstr., 1956, vol. 50, 16075, Apr.). The volatile matter evolution from crushed Kashpir shale was studied with the particles suspended in a carbon dioxide stream moving along a curved path. The apparatus used is described. The volatile matter was practically completely expelled from particles 0.5-7 mm in 60 sec with carbon dioxide at 850°, flowing at the rate of 120 m/sec. The process is complete under such conditions in half the time required for carbonisation with the gas passing through the shale at the rate of 1.25 m/sec.

C.A.

KAZAKOV, Ye.I

PHASE I BOOK EXPLOITATION 228

Vsesoyuznoye soveshchaniye po probleme iskusstvennogo zhidkogo topliva i tekhnologicheskikh gazov. 2d., Moscow, 1954.

Khimicheskaya pererabotka topliva; trudy soveshchaniya (Chemical Treatment of Fuel; Transactions of the Second All-Union Conference on Synthetic Liquid Fuel and Industrial Gases) Moscow, Izd-vo AN SSSR, 1957. 430 p. 2,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut goryuchikh iskopayemykh.

Eds.: Lanin, V. A., Doctor of Chemical Sciences (semi-coking); Lozovoy, A. V., Doctor of Chemical Sciences (hydrogenation); Shishakov, N. V., Doctor of Technical Sciences (gasification); Ed. of Publishing House: Bankvitser, A. L.; Tech. Ed.: Kiseleva, A. A.; Corrector: Bobrov, V. A.

PURPOSE: This book is intended to promote technical progress and to assist in the exchange of experience among scientists working on the production of synthetic liquid fuels and gases.

COVERAGE: This monograph contains selected reports delivered at the Second All-Union Conference on Synthetic Liquid Fuel and Gases which was held in Moscow from November 25, 1954 to December 2, 1954. The reports deal with such subjects as

Card 1/20

the theory and technology of semi-coking of solid fuels, gasification, hydrogenation, and thermal diffusion. The reports also discuss the use of gases as raw material for the production of synthetic liquid fuel and chemical products. This monograph is extensively illustrated with diagrams and tables. For references see Table of Contents. The following institutions are mentioned in this monograph: IGI AN SSSR (Institut goryuchikh iskopayemykh imeni G. M. Krzhizhanovskogo AN SSSR—Institute of Mineral Fuels imeni G. M. Krzhizhanovskiy of the Academy of Sciences, USSR), VNIGI (Vesesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo zhidkogo topliva i gaza — All-Union Scientific Research Institute of Synthetic Liquid Fuels and Gases), Irkutskiy gosudarstvennyy universitet imeni A. A. Zhdanova (Irkutsk State University imeni A. A. Zhdanov), Ural'skiy politekhnicheskiy institut imeni S. M. Kirova (Ural Polytechnic Institute imeni S. M. Kirov), Institut teploenergetiki AN UkrSSR (Institute of Thermal Power Engineering, Academy of Sciences, UkrSSR), Laboratoriya khimicheskoy pererabotki topliv Instituta teploenergetiki AN UkrSSR (Ukrainian Academy of Sciences Laboratory for the Chemical Treatment of Fuels), Slantsekhimicheskiy kombina "Kiviyli" ("Kiviyli" Shale-Chemical Combine), VNIIPS (Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke slantsev—The All-Union Scientific Research Institute for Shale Processing), Institut nefti AN SSSR (Petroleum Institute, Academy of Sciences, USSR), Institut energetiki i khimii Vostochno-Sibirskogo filiala AN SSSR

(Power and Chemistry Institute, East Siberian Branch of the Academy of Sciences, USSR), TsIATIM (Tsentral'nyy nauchno-issledovatel'skiy institut aviatsionnykh topliv i masel — Central Scientific Research Institute of Aviation Fuels and Lubricants), GIAP (Gosudarstvennyy institut azotnoy promyshlennosti — State Institute of the Nitrogen Industry), Saratovskiy gosudarstvennyy institut imeni, N. G. Chernyshevskogo (Saratov State University imeni, N. G. Chernyshevskiy), Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza (All-Union Scientific Research Institute of Natural Gas), Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvennogo zhidkogo topliva (All-Union Scientific Research Institute of Petroleum and Gas Refining and Synthetic Liquid Fuel Production), VTI (Vsesoyuznyy teplotekhnicheskiy institut im. F. Dzerzhinskogo — All-Union Heat Engineering Institute im. F. Dzerzhinskiy), and MEI (Moskovskiy energeticheskiy institut im. Molotov—Moscow Institute of Energetics im. Molotov).

TABLE OF CONTENTS:

Foreword 3

Kazakov, Ye. I.(IGI AN SSSR and VNIGI), and Bezradetskiy, G. N. (IGI AN SSSR and VNIGI). Semi-coking of Solid Fuels and the Tasks of Scientific Research in this Card 3/20

Field

5

There are 14 references of which 9 are Soviet and 5 are English. Reference is made to the following institutions which assisted in the study of raw material for semi-coking: Irkutskiy gosudarstvennyy universitet (Irkutsk State University), Ural'skiy politekhnicheskiy institut (Ural Politechnic Institute), Institut organicheskoy Khimii Akademii nauk SSSR (Institute of Organic Chemistry, Academy of Sciences, USSR).

Lanin, V.A. (IGI AN SSSR) (Deceased). Role and Significance of Scientific Research in the Effective Use of Low Temperature Tars 18

There are no references and no facilities are listed. The one personality referred to is S. R. Sergiyenko.

Larina, V. A. (Irkutskiy gosudarstvennyy universitet). Raw Material Base for Semi-coking in Eastern Siberia 23

There are 3 Soviet references. Twelve tables are included. The following personalities are mentioned: A. V. Kalabina, A. Ye. Favorskiy, and M. F. Shostakovskiy.

Levin, I. S. (Ural'skiy politekhnicheskiy institut) Lignites of the Urals and Siberia as a Raw Material Base for the Synthetic Liquid Fuel Industry. 36

The following personalities are referred to: L. P. Ukhov, Docent, and his assistants A. A. Bashkirtseva and B. S. Gurevich; B. I. Timin, Docent, and his assistants Ye. S. Ekel' and Z. D. Kablova. Extensive work in thermal dissolution of fuel was done by M. K. D'yakova and A. V. Lozov. One table and one diagram are included. There are no references.

Shchegolev, G. M. (Institut teploenergetiki AN UkrSSR). Semi-coking of Ukrainian Lignite by Means of a Solid Heat Carrier 45

No personalities are referred to and there are no references. The only facility mentioned is the Energeticheskiy institut imeni, G. M. Krzhizhanovskogo AN SSSR (Power Institute imeni G. M. Krzhizhanovskiy, Academy of Sciences, SSSR). Eight diagrams are included.

Bezradetskiy, G. N. (VNIGI) and Turskiy, Yu. I. (VNIGI).
Semi-coking of Coal Mines in a "Boiling" Zone

There are no references. Five tables are included. 56

Perepelitsa, A. L. (Vostochno-Sibirskiy filial AN SSSR)
Semi-coking of Powdered Cheremkhovo Coals 65

There are 3 references of which one is Soviet and 2 are English.

The personalities referred to are: Ye. I. Kazakov who demonstrated the advantage of using a gaseous heat-carrier instead of a solid carrier; B. K. Klimov, Corresponding Member, Academy of Sciences, USSR, active in the establishment (1945) of the first power-chemical plant using gaseous and solid heat carriers at the Gusinoozersk Power Plant of the East Siberian Railroad; I. Ye. Kubynin and L. I. Girshman, Members of Komissiya Prezidiuma AN SSSR (Commission of the Presidium, Akademy of Sciences, USSR). The facilities mentioned are: Elektrostantsiya zavoda Libknekhte (the power plant of the K. Libknekht Plant at Dnepropetrovsk). DPRZ (Dnepropetrovskiy parovozoremontnyy zavod—Dnepropetrovsk Locomotive Repair Plant), Gusinoozerskaya elektrostantsiya (Gusinoozersk Power Plant), Sodovyy zavod Buryat-Mongol'skoy ASSR (Soda Plant in the Buryat-Mongol'skaya ASSR), IZTM (Irkutskiy savod tyazhelogo mashinostroyeniya—Irkutsk Heavy Machine-building Plant), Irkutskiy gorno-metallurgicheskiy institut (Irkutsk Mining and Metal-

6/20

lurgical Institute), Zavod imeni Kuybysheva (Plant imeni Kuybyshev), and Institut energetiki i khimii Vostochno Sibirskogo filiala AN SSSR (Power and Chemistry Institute of the East Siberian Branch of the Academy of Sciences, USSR). Seven diagrams are included.

Al'tshuler, V. S. (IGI AN SSSR) and Shafir, G. S. (IGI AN SSSR).
Characteristics of Semi-coking of Solid Fuel Under Pressure 76

There are no references. Personalities mentioned are N. A. Orlova and N. D. Likhacheva of the Khar'kov Coal and Chemical Institute; A. D. Kokurina, O. A. Krylova, F. Fisher and his assistants who studied the effect of pressure on the thermal dissolution of fuels; B. K. Klimov, Ye. I. Kazakov, P. K. Kogerman, V. A. Lanin, G. Ye. Fridman, and V. P. Tsibasov who studied the effect of gas on semi-coking processes. Eight tables and two diagrams are included.

Kazakov, Ye. I. (IGI AN SSSR) and Malashenko, L. P. (IGI AN SSSR).
Dynamics of Separating Volatile Products in Semi-coking Fine-grained Shales in the Gas Flow 87

Card 7/20 There are 4 Soviet references. No personalities or facilities are mentioned. Six tables and 7 diagrams are included.

Kazakov, Ye. I. (IGI AN SSSR); Tyazhelova, A. A. (IGI AN SSSR); and Malashenko, L. P. (IGI AN SSSR).

The Effect of Thermal Treatment of Ukrainian Lignites on the Yield and Composition of Products of Semi-coking. 98

There are 6 Soviet references. Six tables are included. No personalities or facilities are mentioned.

Kuznetsov, V. I. (Institut teploenergetiki AN UkrSSR).
Synthetic Liquid Fuel Obtained from Ukrainian SSR Lignite Primary Tar 105

There are no references. The personalities mentioned are: R. P. Govorova, A. G. Fadeicheva, A. A. Bobrova, M. K. Chernykh, T. B. Kigel', and P. I. Vorob'yev (chief mechanic). The above are all staff members of Laboratoriya khimicheskoy pererabotki topliv Instituta teploenergetiki AN UkrSSR (Laboratory of Chemical Purification of Fuels, Heat Thermal Power Engineering Institute, Ukrainian Academy of Sciences). No facilities are indicated. Five tables and three diagrams are included.
Card 8/20

Nikolayev, G. A. (Slantsekhimicheskiy kombinat "Kiviyli"). Operating Shale-dis il-ling Tunnel Furnaces of the "Kiviyli" Shale-chemical Combine 118

There are no references. The personalities mentioned are: M. S. Kulzhinskiy, engineer, and P. M. Shelounov, chief designer. They are credited with producing the original design of tunnel type furnaces and introducing them in the shale industry. Facilities referred to include: Kokhtla-Yarve Slantsepererabatyvayushchiy zavod (Kokhtla-Yarve Shale Processing Plant), Kashpirskiy slantseperegonnyy zavod Kashpirsk Shale Distilling Plant), Slantsevyye predpriyatiya im. V. Kingiseppa (Shale Plant im. V. Kingisepp at Sallamyae in the Estonskaya SSR), Proyektnyy i nauchno-issledovatel'skiy institut mestnoy i slantsekhimicheskoy promyshlennosti (Planning and Scientific Research Institute of the Local and Shale-chemical Industry), Tallinskiy politekhnicheskiy institut (Tallin Polytechnic Institute), and Moskovskiy institut khimicheskogo mashinostroyeniya (Moscow Institute of Chemical Machine Building).

Feofilov, Ye. Ye. (VNIIPS). Production of Synthetic Liquid Fuel and of Chemical Products from Shale Tar 120

There are no references. The personalities mentioned include: V. F. Polozov

and M. V. Kobyl'skaya (both of the staff of VNIIPS); N. I. Zelenin and S. S. Semenov, who worked with the author in testing the components of shale tar; V. A. Lanin and his assistants of the IGI AN SSSR who studied the catalytic cracking of phenol-free shale tar fractions. Others were: A. P. Sivertsev; O. S. Kuratova; L. I. Gulyayeva; B. I. Ivanov; N. F. Sharonova; M. V. Pronina; G. N. Gamovskaya; and Kh. D. Raudsepp. The research workers, A. Ya. Drinberg and others of LKhTI (Leningradskiy khimiko-tekhnologicheskiy institut—Leningrad Institute of Chemical Technology) collaborated with staff members of the scientific research organizations of Estonskaya SSR. Other organizations mentioned were: Leningradskiy veterinarnyy institut (Leningrad Veterinary Institute); VIZR (Vsesoyuznyy nauchno-issledovatel'skiy institut zashchity rasteniy—All-Union Scientific Research Institute for the Protection of Plants); and TsIATIM (Tsentral'nyy nauchno-issledovatel'skiy institut aviamotorostroyeniya im. P. I. Baranova—Central Scientific Research Institute of Aircraft Engines im. P. I. Baranov).

Lanin, V. A. (IGI AN SSSR) (Deceased); Fridman, G. Ye. (IGI AN SSSR) and Peresleni, I. M. (IGI AN SSSR). Production of Motor Fuels from Generator Shale Tar 136

There are no references, personalities or facilities. Thirteen tables are included.

Bogdanov, I. F. (IGI AN SSSR). Classification of Catalysts for Hydrogenation 195

There are 17 references, of which 14 are Soviet, one English, one German and one translated from German. No personalities or facilities are mentioned.

Kalechits, I. V.; Strakova, K. A.; and Katkova, L. M. (All of the Institut energetiki i khimii Vostochno-Sibirskogo filiala AN SSSR). Conversion of Benzene under Conditions of Destructive Hydrogenation 206

There are 15 references, of which 13 are Soviet, one English, and one German. The personalities mentioned are: N. A. Orlov, B. L. Moldavskiy, M. S. Nemtsov, I. B. Rapoport, A. V. Lozovoy, Ye. I. Prokopets, S. A. Senyavin, and A. Filaretov. Eight tables are included.

Kalechits, I. V., Popova, N. I., and Salimgireyeva, F. G. (All of them from Institut energetiki i khimii Vostochno-Sibirskogo filiala AN SSSR). The Composition of Raw Materials, of Semi-Products and of Destructive Hydrogenation Products of Cheremkhovo Primary Tar 216

There 18 Soviet references. The following personalities are mentioned: A. V. Lozovoy, Ye. I. Prokopets, M. S. Nemtsov, G. S. Landsberg, B. A. Kazanskiy, N. D. Zelinskiy, I. A. Musayen and G. D. Gal'pern. The facilities mentioned are VNIGI and IGI AN SSSR. Ten tables are included.

Lanin, V. A. (IGI AN SSSR); Pronina, M. V. (IGI AN SSSR); and Knyazeva, M. S. (IGI AN SSSR). Chemical Composition of Fractions of Liquid-phase Hydrogenated Cheremkhovo Lignite Tar 231

There are 7 references of which 3 are Soviet, one German, one English, one French, and one Dutch. The only personality mentioned is Ye. I. Tomina of VNIIPS (Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke slantsev—All-Union Scientific Research Institute for Shale Processing). Twelve tables are included.

Gol'dshteyn, D. L. (TsIATIM); Agafonov, A. V. (TsIATIM); Rysakov, M. V. (TsIATIM); and Teregulov, D. Kh. (TsIATIM). Hydrofining of Sulfurous Petroleum Products to Obtain Commercial Motor Fuels. 245

The following personalities are mentioned: B. L. Moldavskiy, V. N. Pokorskiy, K. P. Lavrovskiy, P. V. Puchkov and A. V. Agafonov. Nine tables and 7 drawings are included.

D'yakova, M. K. (IGI AN SSSR). The Manufacture of Synthetic Liquid Fuel and Chemical Products by Means of Thermal Solution of Solid Fuels 261

There are 7 Soviet References. No personalities or facilities are mentioned. Seven tables and 2 drawings are included.

D'yakova, M. K. (IGI AN SSSR); Vol'-Epshteyn, A. B. (IGI AN SSSR); and Sovetova, L. S. (IGI AN SSSR). Development of an Effective Method for Processing Coal and Shale Slurry Obtained During Hydrogenation and Thermal Dissolution. 276

There are 9 references of which 3 are Soviet, 4 English, one Japanese, and one German. No personalities or facilities are mentioned. Eight tables are included.

(Stalinogorsk Chemical Combine), GIAP (Gosudarstvennyy institut azotnoy promyshlennosti—State Institute of Nitrogen Industry), and Vsesoyuznyy nauch-issledovatel'skiy institut iskusstvennogo zhidkogo topliva i gaza (All-Union Scientific Research Institute of Synthetic Liquid Fuel and Gas). One table and five drawings are included.

Lebedev, V. V. (IGI AN SSSR). Continuous Metal-Vapor Process for Manufacturing Hydrogen 320

One table and 13 drawings are included, and there is one Soviet reference. No personalities or facilities are mentioned.

Kashirskiy, V. G. (Saratovskiy gosudarstvennyy universitet im. N. G. Chernyshevskiy). Investigation of the Thermal Decomposition of "Obshchiy Syrt" Pulverized Shale in Vapor Flow 333

There are seven references, of which 5 are Soviet and 2 are English. Personalities mentioned include V. S. Petelina, N. B. Lobacheva, and V. D. Tsarev, who participated in the experimental part of the research, and V. S. Vasil'yev, Z. F. Chukhanov, M. D. Zalesskiy, and I. P.Nikhamov. Two tables are included.

Chemical Treatment of Fuel (Cont.) 228

Anisonyan, A. A.; Volod'ko, N. P.; and Boldyreva, L. A. (All of them are from the Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza). Extraction of a Gas Mixture Rich in Carbon Monoxide from Residual Synthesis Gas 341

There are no references and no personalities. Three tables and 4 drawings are included.

Anisonyan, A. A.; Volod'ko, N. P.; and Boldyreva, L. A. (All of them are from the Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza). Investigation of the Process of Incomplete Combustion of Methane in Oxygen Under Pressure for Manufacturing Synthesis Gas 348

There are no references, and no personalities or facilities are mentioned. Ten drawings are included.

Tesner, P. A. (Vsesoyuznyy nauchno-issledovatel'skiy institut prirodnogo gaza). Thermodynamic Calculation of Continued Processes for Manufacturing Synthesis Gas 358

There are 9 references of which 5 are Soviet, 3 English, and one German. Two drawings are included. No personalities are mentioned.

Leybush, A. G. (GIAP). Catalytic Conversion of Methane with Water Vapor, Oxygen, and Carbon Dioxide 372

There are no references. The personalities mentioned, all co-workers at GIAP, are: B. P. Kornilov, M. A. Shpolyanskiy, O. V. Uvarov, M. A. Lyudkovskaya, Ye. D. Shorina, and I. V. Shulyatikov. Three tables and five drawings are included.

Poluboyarinov, G. N. (Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i polucheniyu iskusstvannogo zhidkogo topliva). The Gasification of Donets Anthracites for Manufacturing Water Gas 383

There are 4 Soviet references. The facilities mentioned are GIAP, VNIGI, and Stalinogorskiy khimkombinat (the Stalinogorsk Chemical Combine). One table and four drawings are included.

Pis'men, M. K. (Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i poluchen'yu iskusstvennogo zhidkogo topliva). Gasification of Lignites in the "Boiling" Zone. 394

There are no references. The facilities mentioned are IGI, VTI, and MEI. Three tables are included.

Yermakov, V. G. (Vsesoyuznyy nauchno-issledovatel'skiy institut po pererabotke nefti i gaza i poluchen'yu iskusstvennogo zhidkogo topliva). The Manufacture of Industrial Gases by Gasification of Lean Fuel and the Removal of Slag in a Liquid State 400

Two tables are included. There are no references.

Bashkirov, A. N. (Institut nefti AN SSSR), Some Methods of Developing Syntheses from Carbon Oxides and Hydrogen, and Methods of Manufacturing Synthetic Hydrocarbons 408

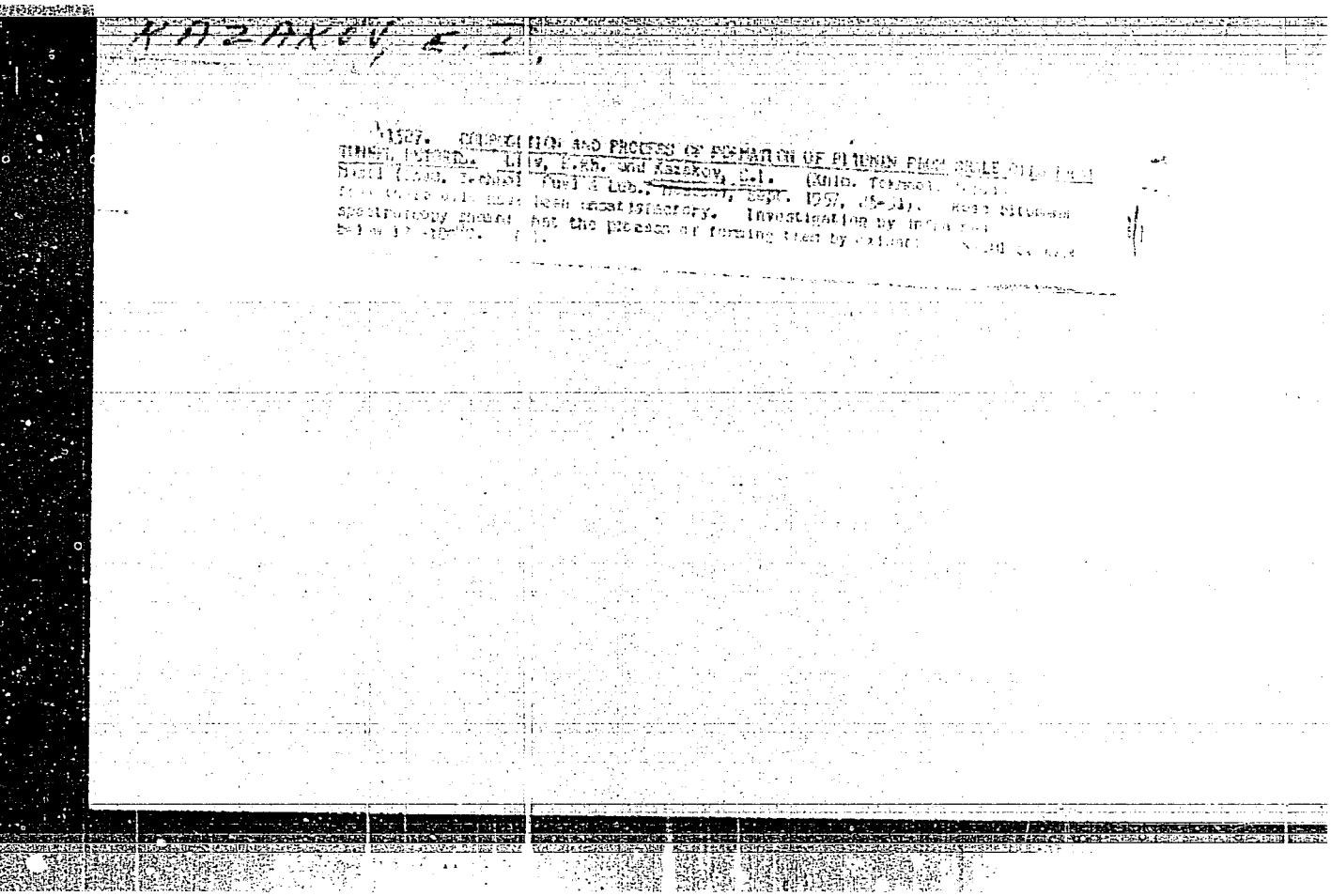
There are 31 Soviet references. The personalities mentioned include the following co-workers of the author: V. V. Kamzolkin, Yu. B. Kryukov, Yu. B. Kagan, V. S. Smirnov, S. M. Loktev, Ya. B. Chertkov, L. I. Zvezdkina, M. I. Khotimskaya, and B. N. Dolgov. Institut tonkoy khimicheskoy tekhnologii imeni M. V. Lomonosova (Institute of Fine Chemical Technology imeni M. V. Lomonosov) is mentioned.

Bashkirov, A. N.; Loktev, S. M.; and Novak, F. I. (All of them are from the Institut nefti AN SSSR). Synthesis of Hydrocarbons From Carbon Monoxide and Hydrogen on Silica Catalysts 418

There are 22 references of which 17 are Soviet, 4 German, and one English. Five tables are included. No personalities are mentioned.

AVAILABLE: Library of Congress

BK/fal
Aug. 28, 1958



KAZAKOV, Ye. I.

LIIV, E.Kh. [Liiv, E.H.]; KAZAKOV, Ye.I.

Composition and process of formation of bitumen from tunnel-kiln shale tars. Khim. i tekh. topl. i masel no.9:25-31 S '57. (MLRA 10:11)

1. Institut goryuchikh iskopayemykh AN SSSR.
(Asphalt) (Oil shales)

KAZAKOV, Ye. I.

24-2-25/28

AUTHORS: Zil'berbrandt, O.I., Kazakov, Ye. I., Kamatochkin, V.I. and Tyazhelova, A.A. (Moscow).

TITLE: Investigation of the composition and of the properties of bitumen from shale tars of the Volga area. (Issledovaniye sostava i svoystv bituma iz degtey privolzhskikh slantsev).

PERIODICAL: Izvestiya Akademii Nauk SSSR, Otdeleniye Tekhnicheskikh Nauk, 1958, No.2, pp. 155-158 (USSR).

ABSTRACT: The results are described of investigation of bitumen obtained by oxidation of heavy fractions of semi-coking tars of Kashiria shale under works conditions. The residual tar fraction, boiling at 320°C, was subjected to oxidation in air at 170 to 180°C. Depending on the duration of the oxidation, various bitumen grades were obtained, the characteristics of which are entered in Table 1, p.156. It is concluded that with increasing duration of the oxidation of the original raw materials an accumulation takes place of hydrogenated and of the condensed asphaltene structures; the quantity is reduced of oils which, in the given case, become more saturated, compensating approximately the constancy of the relative contents of carbon and of hydrogen.

Card 1/2

KAZAKOV, Ya.I.; LIIV, E.Kh.

Presence of ether groups in heavy tars of shale oil. Zhur. prikl.khim. 31 no.7:1125-1126 Jl '58. (MIRA 11:9)

1. Institut goryuchikh iskopayemykh AN SSSR.
(Tar--Spectra)

BARYSHNIKOV, L.I.; KAZAKOV, Ye.I.

Desulfurization-hydrogenation of light shale oils over an iron-based catalyst. Trudy IGI 9:86-95 '59. (MIRA 13:1)
(Oil shales) (Hydrogenation) (Desulfuration)

5.3300

75690
SOV/80-32-10-39/51

AUTHORS: Kazakov, Ye. I., Kuznetsova, V. P.

TITLE: Brief Communications. Investigation of the Chemical Nature of Cracking Residues of Crude Oil

PERIODICAL: Zhurnal prikladnoy khimii, 1959, Vol 32, Nr 10, pp 2342-2344 (USSR)

ABSTRACT: Cracking residues of Baytugan and Bugul'ma crude oils from industrial cracking were investigated. The cracking residue was an asphalt-like product, $d_4^{20} = 1.02181$, viscosity at 80° $^{\circ}E_{80} = 7.9$, 93% of the product was evaporated on distillation at over 320°C. The elemental composition was C 85%, H 9.65%, S 3.6%, O 0.87%. Nitrogen was absent. After usual isolation, the following components were found: carbenes, carboids, asphaltenes, tars, paraffin and naphthene hydrocarbons, monocyclic substitutes, and bicyclic and polycyclic compounds. The hydrocarbons (about 67%) are mostly aromatic. There are 2 tables; 7 Soviet references.

SUBMITTED: August 23, 1958

Card 1/1

KAZAKOV, Ya.I.; MALASHENKO, L.P.; TYAZHELOVA, A.A.; PARFENOV, I.A.; KARZHAVINA, N.A.

Effect of high rate heating and of the process temperature on the composition of coal tar in the thermal decomposition of Moscow Basin coal. Energotekh.ispol'.topl. no.1:131-138 '60. (MIRA13:10)

(Coal-tar products)

KAZAKOV, Ye. I.; KARPOVA, N. F.; MELENT'YEV, P. N.; CHEPIK, A. Ya.;
Prinimal uchastiye: CHURSIN, P. M.

Composition of tars obtained in the pyrolysis of brown coals in a fluidized bed. Trudy IGI 17:152-156 '62.
(MIRA 15:10)

(Coal-tar products) (Fluidization)

KAZAKOV, Ye. I.; LARIN, A. Ya.; VORONINA, T. B.; LYUBIMOVA, Z. V.; GOROSHKO, G. K.

Surface-active substances from peat tar hydrocarbons. Trudy IGI 17:157-168 '62. (MIRA 15:10)

(Surface-active agents) (Peat)

KAZAKOV, Ye. I.; TYAZHELOVA, A. A.; MALASHENKO, L. P.; GRIGOR'YEVA, K. V.

High-speed pyrolysis of vapor and gas products obtained in the semicoking of Ukrainian brown coals. Trudy IGI 17:34-42 '62. (MIRA 15:10)

(Coal—Carbonization)

KAZAKOV, Ye. I.; MELENT'YEV, P. N.

Catalytic pyrolysis of pulverized fuels under hydrogen pressure. Trudy IGI 17:43-46 '62. (MIRA 15:10)

(Fuel) (Pyrolysis) (Hydrogen)

KARAVAYEV, N. M.; KAZAKOV, Ye. I.; TYAZHELOVA, A. A.; PANFILOVA, Ye. N.

Yield and composition of light phenols obtained from a mean-temperature brown coal tar and their utilization. Trudy IGI 17:145-151 '62. (MIRA 15:10)

(Phenol condensation products) (Coal tar)

KAZAKOV, Ye. I.; LARIN, A. Ya.; VORONINA, T. B.; LYUBIMOVA, Z. V.; GOROSHKO, G. K.

Light oil of a mean temperature brown coal tar as a raw material for the production of surface-active substances. Trudy IGI 17: 169-173 '62. (MIRA 15:10)

(Coal-tar products) (Surface-active agents)

KAZAKOV, Ye.I., doktor tekhn. nauk, otv. red.; LOSKUTOVA, I.P., red.

[Chemical processing of tars] Khimicheskaia pererabotka smol. Moskva, Nauka, 1965. 113 p. (MIRA 18:4)

1. Moscow. Institut goryuchikh iskopayemykh.

KAZAKOV, Ye.I., doktor khim. nauk, otv. red.; KONDRAT'YEVA, V.I., red.

[Chemistry and technology of tars obtained from the thermal processing of solid fuels] Khimiia i tekhnologiia smol termicheskoi pererabotki tverdykh topliv. Moskva, Nauka, 1965. 286 p. (MIRA 18:4)

1. Moscow. Institut goryuchikh iskopayemykh.

KAZAKOV, Ye. M. and KITAYEV, G. A.

"Electronmicroscopic Investigations of the Film Formation Mechanism of Copper Hydroxide on a Solid Surface Belonged to the Group of Reports Devoted to the Problem of Adsorptional Interaction."

report presented at the Section on Colloid Chemistry, VIII Mendeleyev Conference of General and Applied Chemistry, Moscow, 16-23 March 1959.
(Koll. Zhur. v. 21, No. 4, pp. 509-511)

KAZAKOV, Ye.M.; KITAYEV, G.A.; MOKRUSHIN, S.G.

Experimental studies of laminar systems. Part 25: Electron microscopic investigation of the structure and mechanism of formation of ultrathin copper hydroxide films formed on a solid surface. Koll.zhur. 22 no.1:23-24 Ja-F '60. (MIRA 13:6)

1. Ural'skiy politekhnicheskiy institut imeni S.M.Kirova Sverdlovsk.
(Copper hydroxide) (Films (Chemistry))

27393
S/153/61/004/003/003/008
E071/E435

5.4400

AUTHORS: Kazakov, Ye.M., Kitayev, G.A. and Mokrushin, S.G.

TITLE: An experimental investigation of laminar systems. XXVI. The kinetics and mechanism of the formation of copper hydroxide films on the surface of glass

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy. Khimiya i khimicheskaya tekhnologiya, Vol.4, No.3, 1961, pp.411-415

TEXT: The formation of thin films on the phase boundaries liquid-gas and liquid-solid has been investigated in the authors' laboratory since 1930. In the opinion of the authors, the mechanism of the formation of such films consists of the following stages: formation of a colloidally dispersed substance, adsorption of colloidal particles on the phase boundary and their growth due to coagulation. In the present paper, some experimental data on the kinetics of the formation of copper hydroxide film on the surface of glass submerged in a solution of copper ammoniacate are reported and considered in the light of the above postulated mechanism. The experimental procedure consisted of the immersion of washed glass plates into specially prepared

An experimental investigation ...

copper ammoniacate solutions for a given time and measuring the thickness of the film formed by interference colours of the reflected light and the concentration of colloidally dispersed hydroxide in the solution by the nephelometric method. The preliminary preparation of copper ammoniacate solutions consisted of the removal of the excess of ammonia by stirring until the appearance of a noticeable opalescence and filtration. It was found that the highest rates of formation of copper hydroxide films takes place at a concentration of $Cu(NH_3)_4SO_4$ from 0.005 to 0.025 mole/litre. The rate of growth of the film increases with increasing opalescence of the solution. If the hydrolysis of copper ammoniacate is prevented (experiments in closed flasks) then the film growth stopped on the attainment of a certain minimum value of opalescence. This fact is considered as proof of the colloidal-chemical nature of the process of formation of the film. By increasing the surface area open to the atmosphere of the vessel in which the experiments were carried out, i.e. by increasing the rate of removal of ammonia, the velocity of growth of the film increases. To describe the process, the authors used an equation derived by M. Smolukhovskiy for the adsorption of a colloidally

Card 2/4

An experimental investigation ...

dissolved substance on a solid surface:

$$M = \frac{2\nu\sqrt{Dt}}{\sqrt{\pi}}$$

where M is the total number of particles adhering to the solid surface at the time t, ν is the number of particles in 1 cm^3, D is the coefficient of diffusion. Assuming ν = constant, $\lg M = K + 0.5 \lg t$. Using this equation and assuming that the thickness of the film Δ is directly proportional to the number of adsorbed particles ($\lg \Delta = K_1 + 0.5 \lg t$), the authors obtained a good agreement between the experimental and calculated results. In the choice of optimal conditions for the process, it is necessary to control the velocity of hydrolysis (i.e. the velocity of formation of sol) and the velocity of coagulation, increasing the former and decreasing the latter. At a high velocity of coagulation (a high concentration of copper ammoniacate and at temperatures above 25°C) the velocity of film growth is low. There are 6 figures and 10 references: 8 Soviet and 2 non-Soviet. The reference to an English language publication reads as follows:

Card 3/4

SOV/180-59-3-35/43

AUTHORS: Kazakov, Ye.N., Lapin, A.Ya. and Tyazhelova, A.A.(Moscow)

TITLE: Surface-Active Substances from Neutral Oils Obtained from Brown Coal Tar

PERIODICAL: Izvestiya Akademii nauk SSSR, Otdeleniye tekhnicheskikh nauk, Metallurgiya i toplivo, 1959, Nr 3, pp 164-170(USSR)

ABSTRACT: The results of an investigation of tar obtained on thermal treatment of the Aleksandriysk brown coal in a pilot plant of the Institute of Thermal Techniques of the Academy of Sciences of the UkrSSR, at a temperature of about 600°C are reported. A neutral oil separated from the tar was studied by chemical and physico-chemical analytical methods. For this purpose it was preliminarily fractionated into 3 fractions boiling within ranges: 200 - 230°; 230-270° and 270-310°C. Characteristics of the separated fractions are given in table 1. The largest fraction, boiling at 230-270°C, was then separated into groups of compounds using chromatography on silicagel (Table 2). The following group composition of the above fraction was established: paraffin-naphthenic hydrocarbons - 6.6%; unsaturated - 8.8%; aromatic and sulphurous - 67.8%;

Card 1/3

Surface-Active Substances from Neutral Oils Obtained from Brown Coal Tar

neutral oxygen containing compounds 14.10%; losses - 3.3%. On the basis of aromatic hydrocarbons and olefines surface active substances of the type alkylarylsulphonates were synthesised and thoroughly investigated. On the basis of their properties (surface tension, floculation of calcite, foaming and washing properties) the alkylarylsulphonates obtained can be recommended as detergents for the production of synthetic washing media in quality similar to those obtained from petroleum distillates. The best properties are possessed by alkylarylsulphonates produced from the neutral oil fraction boiling at 230-270°C. During the process of sulphonation of aromatic compounds with short side chains they are, apparently, simultaneously alkylated by the olefines present with the formation of long side chains which leads to the formation of alkylarylsulphonates with adequate washing properties.

SOV/180-59-3-35/43

Surface-Active Substances from Neutral Oils Obtained from Brown Coal Tar

There are 7 figures, 4 tables and 4 references, 3 of which are Soviet and 1 German.

SUBMITTED: July 22, 1958

Card 3/3

KAZAKOV, Ye.N. [Kazakov, IE.I.], doktor tekhn. nauk;
TYAZHELOVA, A.A. [Tiazholova, A.O.], kand. tekhn. nauk;
PANFILOVA, Ye.M. [Panfilova, IE.M.]

Study of the thermal decomposition of Ukrainian brown coal by a solid heat carrier at a temperature of 600°. Kompl. vyk. pal.-energ. res. Ukr. no.1:222-229 '59. (MIRA 16:7)

1. Institut goryuchikh iskopayemykh AN SSSR.
(Coal--Carbonization)

L 57004-65 EWG(j)/EWT(m)/EWG(m)/EWP(j)/EWP(t)/EWP(b)/EWA(b)/EWA(l) Pc-4/
Peb IJP(c) JD/RM

ACCESSION NR: AP5017101 UR/0054/65/000/002/0095/0102

AUTHOR: Kazakov, Ye. V.; Karpova, I. F. 31 30 B

TITLE: Ion-exchange properties of copper ferrocyanides

SOURCE: Leningrad. Universitet. Vestnik. Seriya fiziki i khimii, no. 2, 1965, 95-102

TOPIC TAGS: copper ferrocyanide, ion exchange, potassium ferrocyanide, copper salt, inorganic ion exchanger, ferrocyanide membrane, macroelectrophoresis, anion exchanger, hard gamma radiation

ABSTRACT: In some cases inorganic ion exchangers are superior to ion-exchange resins, which disintegrate at temperatures exceeding 100°C and have a low resistance to acids and alkalis and irradiation. Nevertheless, ion exchange based on inorganic ion exchangers has so far been relatively uninvestigated. For example, copper ferrocyanides are capable of exchange interaction with ions of barium and cesium. In this connection, the study of the ion-exchange properties of ferrocyanides is of interest to the solution of a number of major problems concerning certain properties of ferrocyanide membranes, their selective permeability, the variability of composition of the ferrocyanides of heavy metals

Card 1/4

L 57004-65
ACCESSION NR: AP5017101

as a function of the type of alkali metal present in the solution during precipitation of ferrocyanide. It is also known that the anions of the particular copper salt used to obtain a ferrocyanide affect the properties of ferrocyanides. In this connection, the authors investigated the ion exchange properties of copper ferrocyanides as a function of the techniques of obtaining these ferrocyanides and with respect to the ions of sodium, potassium, and copper, depending on the ratio between $K_4Fe(CN)_6$ and the anions of the different copper salts. The copper ferrocyanide precipitates were obtained by combining different volumes of source reagents, and by draining or decanting the precipitate. The source reagents used were $K_4Fe(CN)_6$ and the copper salts $CuSO_4$, $CuCl_2$, $Cu(NO_3)_2$, and $Cu(CH_3COO)_2$. The polarity of the charge and the magnitude of the ζ-potential were verified by macroelectrophoresis in 0.01N HCl. The exchange interaction between H^+ ions and Na^+ and K^+ was investigated on negatively charged ferrocyanide powders, and the exchange interaction between OH^- ions and Cl^- ions, on positively charged powders. The pH-dependence of the exchange capacity of the ferrocyanides was investigated by the method of curves of potentiometric titration. It was found that the exchange capacity with respect to Na^+ and K^+ differs for ferrocyanides obtained under the same conditions. Further, on ferrocyanides obtained from excess $K_4Fe(CN)_6$ with $CuSO_4$ and $CuCl_2$ the adsorption

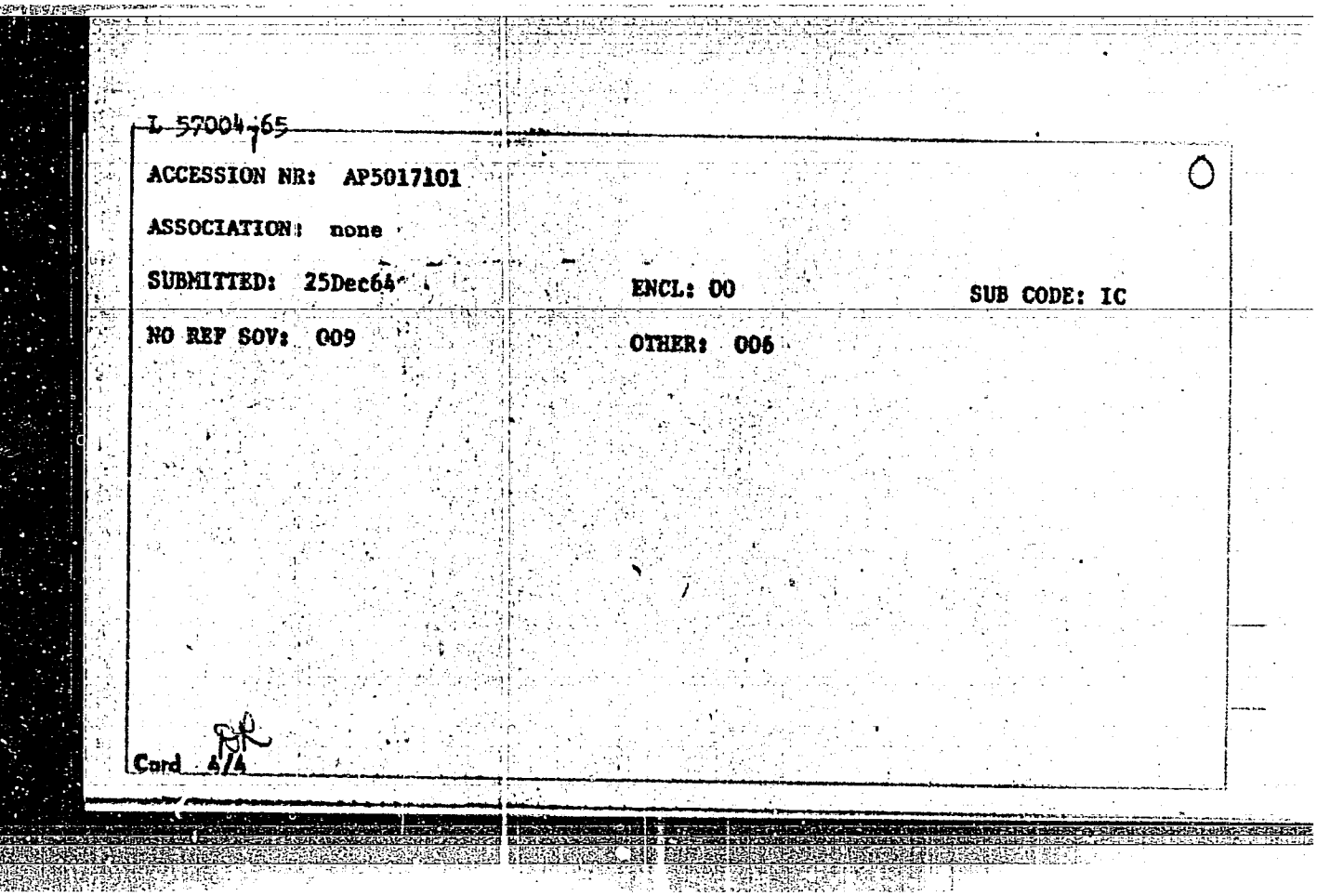
Card 2/4

L 57004-65

ACCESSION NR: AP5017101

of Na^+ and K^+ is greater than on ferrocyanides obtained from $Cu(CH_3COO)_2$ or with equivalent ratios of source reagents. Thus, for the case of excess $K_4Fe(CH)_6$+ $CuSO_4$ the adsorption of Na^+ and K^+ on the copper ferrocyanide amounts to 0.28 mg-equiv/g for both ions, whereas in the case of equivalent ratio between $K_4Fe(CN)_6$ and $CuSO_4$ this adsorption amounts to 0.15 mg-equiv/g for both ions, and for the case of excess $CuSO_4$+$K_4Fe(CH)_6$ it amounts to 22 mg-equiv/g for both ions. Thus, the type of the copper-salt anion and the reagent ratio do indeed affect the exchange capacity of the investigated ferrocyanides. Ferrocyanides obtained when the ratio of the copper salt to $K_4Fe(CH)_6$ exceeds 1:1 are anion exchangers. The absorption of copper ions by the positively charged surface of the copper ferrocyanides was somewhat unexpected; but this is attributed by Schultz and Herac (Croat. chim. acta, 30, no. 2, 127, 1958) to the specific nature of the adsorption of the ions of heavy metals. Exposure of the ferrocyanides to Co^{60} hard γ-radiation (30,000 rem) and their subsequent X-ray diffraction studies revealed that copper ferrocyanides are radiation-resistant, which expands their range of applications as ion exchangers. Orig. art. has: 5 figures, 3 tables.

Card 3/4



L 57004-65

ACCESSION NR: AP5017101

ASSOCIATION: none

SUBMITTED: 25Dec64 ENCL: 00 SUB CODE: IC

NO REF SOV: 009 OTHER: 006

Card 1/1

KARPOVA, I. F.; KAZAKOV, Ye. V.

Colloidal chemical processes taking place in food products during storage. Izv.vys.ucheb.zav.; pishch.tekh.no. 2:21-23 '64. (MIRA 17:5)

1. Leningradskiy institut sovetskoy torgovli imeni F. Engel'sa, kafedra organicheskiy, fizicheskoy i kolloidnoy khimii.

ANTROPOV, K.N.; KAZAKOV, Yu.I.

Noncontact copying system for cutting gear wheels. Stan. i instr. 36 no.4:21-22 Ap '65. (MIRA 18:5)

L 55119-65 EWT(d)/EWT(m)/EWP(w)/EWP(v)/EWA(d)/EWP(c)/T/EWP(t)/EWP(h)/EWP(k)/EWP(z)/EWP(b)/EWP(l) Pf-4 IJP(c) JD/EM

ACCESSION NR: AP5017571 UR/0114/64/000/012/0045/0046

AUTHOR: Dubovskiy, I. Ye. (Candidate of technical sciences); Tyryshkin, V. G. (Candidate of technical sciences); Kazakov, Yu. M. (Engineer)

TITLE: Field conference on power machine building

SOURCE: Energomashinostroyeniye, no. 12, 1964, 45-46

TOPIC TAGS: electric engineering conference, electric power engineering

Abstract: A report on the All-Union conference on Power Machine Building called by the State committee of heavy, power and transport machine construction of GOSPLAN [state planning organization] in Leningrad on 5-8 May 1964. Representatives from boiler and turbine plants, representatives of the branches of industry concerned, sovnarkhozes of economic regions and representatives of the state planning organs of the USSR and the Union Republics took part, along with representatives of the state committee on coordination of science and research of the USSR, RSFSR and Ukrainian SSR, of the state production committee on power and electrification, state gas industry committee, and various institutes. Resolutions of the conference called for sharp increases in the production of electrical power and

Card 1/2

L 55119-65

ACCESSION NR: AP5017572

heat energy in the coming 5 years. Successes in this direction in 1963 were noted. Examples of past successes of individual plants and regions were noted. The superiority of domestic turbines over foreign turbines in specific output, power and dimensions is noted. Plans for the future in the output of existing as well as the introduction of new types of power equipment are briefly outlined. Areas in the industry in need of special attention, such as quality control in boiler plants, vibration stability of turbines, increased production of power equipment for the chemical, gas and oil industries, the increased usage of high-chrome stainless steels in steam turbine manufacture, are noted.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: EE

NO REF SOV: 000 OTHER: 000 JPRS

Card 2/2

KAZAKOV, Yu.N.

Device for pasting on oriented crystals (attachment to an RKOP chamber). Kristallografiia 9 no.4:585-586 Jl-Ag '64. (MIRA 17:11)

1. Moskovskiy gosudarstvennyy universitet imeni Lomonosova.

88771

S/182/60/000/010/007/015/XX
A161/A030

1.1200

AUTHOR: Kazakov, Yu.P.

TITLE: Deformations and Stresses in Extrusion of Parts with Complex Shape

PERIODICAL: Kuznechno-shtampovochnoye proizvodstvo, 1960, No. 10, pp. 1 - 4

TEXT: In a previous investigation (Ref. 6, "Kuzn. - Shtamp. proizvodstvo", No. 8, 1960, Yu.P. Kazakov) deformations and stresses were studied on a coordinates grid traced on sheet metal, with 25 mm squares. This pattern turned out to be inconvenient for practical use since the calculations were too complex. The investigation was repeated with a coordinates network in the form of circles turning into ellipses when deformed by extrusion. The major deformations were determined by measuring the long and the short axes of an ellipse and formulae (1) - (8). The octahedral stress was determined by plotting a $\tau = \tau(\gamma_0)$ relation curve (where τ = octahedral stress, and γ_0 = the octaedrical shift value) (Fig. 2). The calculation results for five automobile body parts are given in a table. It may be concluded from the results obtained that stresses forming in extrusion of complex sheet parts are of two kinds: 1) Biaxial tension, and 2) Tension with compression. At the first moment of extrusion, the punch exerts pressure on the mid

Card 1/8

Deformations and Stresses in Extrusion of Parts with Complex Shape

of the blank causing biaxial tension in the mid. But the friction between the slipping metal and the punch prevents further stretching in the mid, and the final shaping of the part is obtained mainly through plastic deformation with the punch of metal outside the contact area. In corners, near the transfer of the flange into the wall the stresses have opposite sign. Only very smooth transfers are an exception, as for instance in the cab top. Single protrusions form with tension stress, as the A spot on a cab side (Fig. 4). The octahedral shift values given in the table are the highest. Tearing of metal is frequent in these spots at the Plant im. Likhachev. It was stated that steel used for extruded parts at the plant often had an insufficient modulus of strengthening, which might be the cause of ruptures. The steel grade used for automobile bodies is 08 BT (08VG) per GOST 914-56 standard, with ultimate strength range 28 - 37 kg/mm^2, and the metal was too near the bottom strength range 28 - 37 kg/mm^2, and the metal was too near the bottom strength limit. More uniform plastic deformation of the whole blank can be achieved by using a lubricant on the blank in contact with the punch, and by stronger braking of the flange. The investigations have been carried out at Avtozavod im. Likhacheva (Automobile Plant imeni Likhachev) and in the pressure working laboratory of IMASh AN SSSR under the guidance of Candidate of Technical

88711
S/182/60/000/010/007/015/XX
A161/A030

Deformations and Stresses in Extrusion of Parts with Complex Shape

Sciences A.D. Tomlenov. There are 7 figures and 1 table.

Figure 1:

Diagram of simplest extrusion

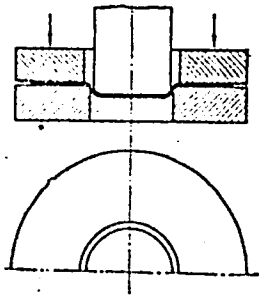


Figure 2:

Dependence $\tau_0 = \tau_0 (\gamma)$

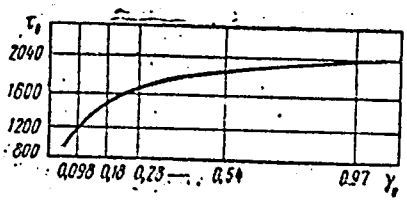
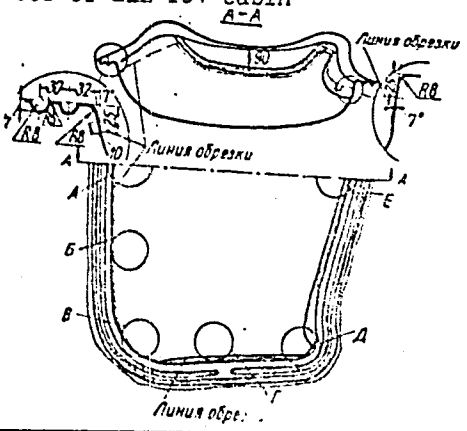


Рис. 2. Зависимость $\tau_0 = \tau_0 (\gamma_0)$.

Figure 3:

Roof of ZIL-164 cabin



Card 3/8

88771

S/182/60/000/010/007/015/XX
A161/A030

Deformations and Stresses in Extrusion of Parts with Complex Shape

Figure 4:

Side piece of ZIL-164 cabin

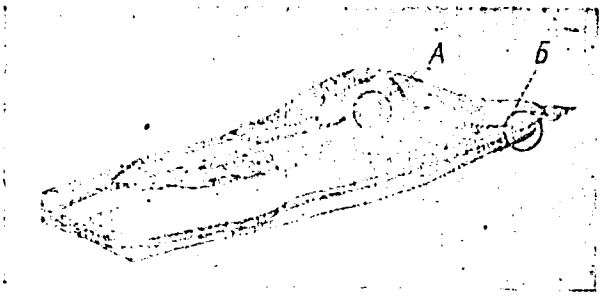
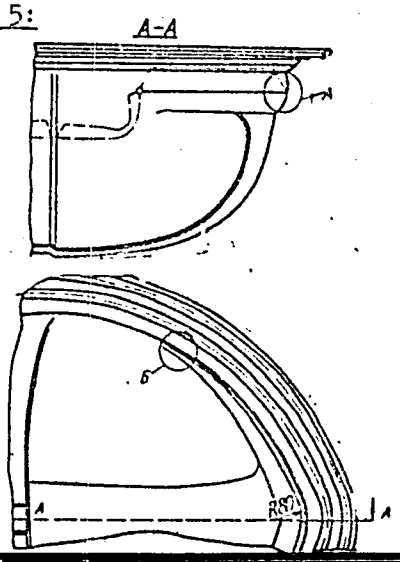


Рис. 4. Боковина кабины ЗИЛ-164.

Figure 5:

Head coating of radiator



Card 4/ 8

88771

S/182/60/000/010/007/015/XX
A161/A030

Deformations and Stresses in Extrusion of Parts with Complex Shape

Figure 6:

Cabin fender

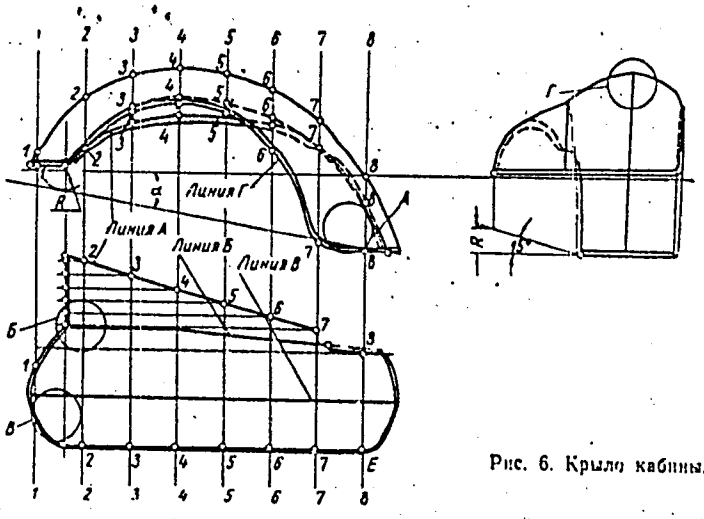


Рис. 6. Крыло кабины.

Card 5/8